

RESPONSE TO NOTICE OF NON-COMPLIANT AMENDMENT

USSN: 10/671,987

Group Art Unit: 2621

Filed: September 25, 2003

IN THE CLAIMS

Please amend claims 1-3 as follows.

1. (Currently Amended) A gamma correction method comprising:

a first conversion step of converting image data using a first table storing conversion values in addresses corresponding to at least input values[[:]]  $u(k)$  represented by  $u(k) = a b^{-k}$  [[(where a and b are constants and k is 0, 1, 2, ...m)]] of all input values and linear interpolation, where a and b are constants and k is 0, 1, 2, ...m;

a second table storing step of storing in memory a second table storing conversion values set in response to the image data provided at [[said]] the first conversion step in addresses corresponding to at least input values[[:]]  $v(k)$  represented by  $v(k) = ck+d$  [[(where c and d constants and k is 0, 1, 2, ...n)]] of all input values, where c and d constants and k is 0, 1, 2, ...n; and

a second conversion step of converting the image data provided at said first conversion step using the second table and linear interpolation.

2. (Currently Amended) A gamma correction unit comprising:

a memory [[storing]] that stores a first table storing conversion values in addresses corresponding to at least input values[[:]]  $u(k)$  represented by  $u(k) = a b^{-k}$  [[(where a and b are constants and k is 0, 1, 2, ...m)]] of all input values and linear interpolation, where a and b are constants and k is 0, 1, 2, ...m;

first conversion [[means for converting]] unit that converts image data using the first table and linear interpolation;

second table storing [[means for storing]] unit that stores in the memory a second table storing conversion values set in response to the image data provided by said first conversion [[means]] unit for at least input values[[:]]  $v(k)$  represented by  $v(k) = ck+d$  [[(where c and d are constants and k is 0, 1, 2, ...q)]] of all input values, where c and d are constants and k is 0, 1, 2, ...q; and

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second conversion [[means for converting]] unit that converts the image data provided by said first conversion [[means]] unit using the second table and linear interpolation.

3. (Currently Amended) An image read system comprising:
  - a scanning section [[for scanning]] that scans an optical image and [[outputting]] outputs image data representing the optical image[[,]];
    - an optical system [[for inputting]] that inputs an optical image of an original to the scanning section[, and]];
      - a gamma correction unit including, [[as claimed in claim 2, characterized by:]]
        - a memory that stores a first table storing conversion values in addresses corresponding to at least input values  $u(k)$  represented by  $u(k) = a b^{-k}$  of all input values and linear interpolation, where  $a$  and  $b$  are constants and  $k$  is  $0, 1, 2, \dots, m$ ,
        - a first conversion unit that converts image data using the first table and linear interpolation,
        - a second table storing unit that stores in the memory a second table storing conversion values set in response to the image data provided by the first conversion unit for at least input values  $v(k)$  represented by  $v(k) = ck+d$  of all input values, where  $c$  and  $d$  are constants and  $k$  is  $0, 1, 2, \dots, q$ , and
        - a second conversion unit that converts the image data provided by the first conversion unit using the second table and linear interpolation;
      - a setting [[means for causing]] unit that causes the scanning section to output low-resolution image data, causing the first conversion [[means]] unit to convert the low-resolution image data output by the scanning section, and setting a conversion value in the second table in response to the low-resolution image data provided by the first conversion [[means]] unit; and
      - a conversion [[means for causing]] unit that causes the scanning section to output high-resolution image data and [[causing]] causes the first conversion [[means]] unit and the second conversion [[means]] unit to convert the high-resolution image data output by the scanning section.